

INTERNATIONAL DEVELOPMENT RESEARCH CENTRE

SOCIOECONOMIC, AGRICULTURAL AND ENVIRONMENTAL
IMPLICATIONS OF QAT PRODUCTION/CONSUMPTION
IN YEMEN

CONSULTANCY REPORT

(7 NOVEMBER TO 19 NOVEMBER, 2000)

Shibru Tedla
Organization of Social Science Research
in Eastern and Southern Africa (OSSREA)
Addis Ababa, ETHIOPIA
Tel. 251-1-551163/553281
Fax 251-1-551399
E-mail: ossrea@telecom.net.et

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Acknowledgement

OSSREA appreciates the confidence bestowed on it by the International Development Research Centre (IDRC) and the Environmental Protection Council of Yemen to carry out this assignment within the framework of a collaborative project between OSSREA and IDRC. The consultant assigned for this job appreciates the support provided to him by members of the research team who went beyond the call of duty to facilitate his work, as well as, to make his stay in Yemen a pleasant one.

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1.0 INTRODUCTION

The Organization of Social Science Research in Eastern and Southern Africa (OSSREA) provides support to People, Land and Water Programme (PLaW) of the International Development Research Centre (IDRC) by assigning consultants to carry out monitoring/evaluation activities. This is provided for in the agreement entered between the two parties (i.e IDRC and OSSREA) within the IDRC supported project of OSSREA, entitled "**Capacity Building for Monitoring, Evaluation and Social Analysis in Natural Resources Management**".

The research project for which consultancy support was required, entitled "**Socio-economic, Agricultural and Environmental Implications of Qat Production/Consumption in Yemen**", is supported by IDRC and implemented by the Environmental Protection Council of Yemen. OSSREA assigned a consultant for ten day to provide support to the 'Qat' research team in Yemen (7 November to 19 November, 2000 (see Annex 7.4). The project was approved in 1999 and to date literature review and formulation of draft questionnaires have been completed. The questionnaires were discussed in detail with the consultant and adjustments made, based on the feedback received from the Consultant. Preliminary field test have been carried out .

The objectives of the project for which consultancy support was provided are as follows:

General Objective:

- to assess and analyse the socio-economic, agricultural and environmental implications of Qat production and consumption in order to facilitate networking around Qat and to have an input in government policy on the matter.

Specific Objectives:

- to review the available literature on all aspects of Qat in order to identify gaps in knowledge;
- to study the socio-economic implications of Qat production and consumption;
- to study the agricultural and environmental implication of Qat production;
- to facilitate discussion amongst stakeholders around perspectives of Qat based on the results of the research;

- to generate issues and guidelines towards policy formulation concerning Qat production and consumption;
- to facilitate public awareness around the issue through publications, networking, and the use of mass media.

To date the major portion of the literature review is apparently completed and an interim report (comprising both financial and technical aspects) has been submitted to IDRC. A draft list of references, some with abstracts, has been prepared. Draft questionnaires, relevant to the various components of the project i.e. socio-economic, agricultural, environmental, have been prepared and are awaiting further field testing prior to their finalization. These questionnaires were discussed in detail with the Consultant and adjustments made subsequent to appreciation of the Consultant's suggestions. Preliminary field tests have already been carried out.

The Consultant's assignment in the present mission entailed:

- provision of support to the bibliographical review;
- provision of support to the completion of the questionnaires and definition of sample;
- provision of support to the conceptualization of the Workshop.

The present assignment lasted from 7 November to 19 November 2000.

2.0 LITERATURE REVIEW

2.1 Gap Identification

Literature review is a major component of the project, and it is the component which is expected to bring the main issues to be dealt with in the research to a more focused state by distilling existing relevant information, and through the process, providing solid information of what is already known. There is a lot that is being said in Yemen, but most of what is stated is not substantiated through research. It is to shed light into this setting and more that research is being carried out in Yemen.

The information available, according to the review made by the research team, is scanty. Even this available information is not organized in a synthetic manner, so as to provide succinct information on Qat. There is a need to systematically present the literature review findings for better appreciation of the scientific data therein. The research team is, therefore, advised to present, in a few pages, the essential elements of the literature reviewed to date in a systematic manner. These brief presentations

should give a fairly comprehensive picture of what is known about Qat.

2.2 The Bibliography/Literature Citation

2.2.1 Literature Citation

The literature citation in the bibliography does not follow any particular style. The citation of literature should follow one of the accepted formats of reference citation. Once a format is adopted, then all the reference citation should stick to that format. Example of an acceptable format of reference citation are presented below:

(a) Published Article

Omer, A.H.S. 1978. Oxamniquine for treating *Schistosoma mansoni* in the Sudan. Brit. Med. J., 2: 163-165.

(b) Unpublished Information

Environmental Protection Council. 1999. Biodiversity in the Avifauna of Yemen. Unpublished Report. 315 pp.

(c) Books

Belding, D.L. 1965. Textbook of Parasitology. Third Edition. Meredth Publishing Co. New York. 1374 pp.

2.2.2 Bibliography

It is suggested that the research team compile a bibliography on Qat. The bibliography could be divided into two main parts, Part I and Part II.

Part I could present a list of references of all research done on Qat anywhere in the world, including Yemen.

Part II could present references, with abstracts, on work done on the following aspects of Qat.

- (a) Socio-economic implications of Qat production/consumption in Yemen and elsewhere.
- (b) Agricultural implications of Qat production/consumption in Yemen and elsewhere.
- (c) Environmental implications of Qat production/consumption in Yemen and elsewhere.
- (d) Policy implications of Qat production/consumption in Yemen and elsewhere.

3.0 QUESTIONS (QUESTIONNAIRES) VIS A VIS RESEARCH OBJECTIVES

3.1 Whom do the Questionnaires Address?

The target groups that the questionnaires will address do vary. A checklist of target groups and what component of the research project (i.e. the questionnaires therein) will address them are listed below.

- | | | | |
|---|------------------------------|---|----------------|
| - | Farmers/Producers | : | Socio-economic |
| | | : | Agricultural |
| | | : | Environmental |
| - | Qat Retailers | : | Socio-economic |
| | | : | Environmental |
| - | Consumers | : | Socio-economic |
| | | : | Environmental |
| - | Pesticide/Fertilizer traders | : | Environmental |
| | | : | Agricultural |
| - | Policy Makers | : | Agricultural |
| | | : | Environmental |
| | | : | Policy |
| - | Customers Officials | | |
| | Tax Officials | : | Environmental |
| | | : | Policy |

3.2 Criteria for Reviewing Questionnaires

The questionnaires were reviewed mainly with the following points in mind:

- Are the questions in the questionnaires focused enough in such a way that responses to them will generate data required for clarification of issues under investigation?
- Are the questions precise and clear?
- Are the questions easily understandable by the intended respondents?
- Are the questionnaires easy to administer?
- Have the questions taken cultural aspects into account?
- Are the questionnaires comprehensive enough to address all relevant issued under investigation?
- Are the questions gender sensitive?

3.3 Comments on Specific Questionnaires

3.3.1 Socio-economic component of the research project (discussed with Dr. Mahasen Munibari)

Clarity of language:

There were many questions in the questionnaire which needed clarification. Quite often, it was difficult to appreciate what issues were being addressed in these questions.

Standardization of questionnaires

The age ranges in the questions were not uniform; this required standardization of the same eg.

9 years and below

10 - 15 years

16 - 40 years

41 - 65 years

above 65 years

5 - 10 years

11 - 20 years

21 - 30 years, etc.

These age ranges refer to specific questions in the questionnaire.

Content

It was felt that the questionnaires were not comprehensive, and hence did not cover many areas that ought to be covered. The questionnaires should address socio-economic implication of Qat production/consumption in Yemen. However, the questionnaires, as presented, dealt mainly with **consumption**; **production** was not given much coverage.

For example, issues such as the following were not addressed.

- What is the implication of Qat production on the family income of farming communities?
- Does Qat production provide farmers with means of better livelihood compared with other crops?
- Does Qat trade reduce the unemployment at local and national levels?
- Does Qat production (farming) increase the annual productivity of farms?

- Is the purchasing power of farming communities enhanced as a result of Qat production?
- What would the middlemen (retailers) do, if they were not retailing Qat?
- Does Qat chewing forge better friendship amongst Qat chewers, compared to what it could have been, had they not been chewing Qat together?
- Are there economic opportunities lost by Qat chewers, as a result of the spending a lot of time chewing Qat?
- Are social conflicts avoided because people spend a lot of time chewing Qat with friends in a peaceful manner?

Social impacts such as those on:

- * livelihood systems;
- * rural/urban migration;
- * revenue from sales;
- * empowerment of women, if any, are not addressed.

It is believed that inclusion of questions which will address issues raised above will make the questionnaires more comprehensive.

3.3.2 Agricultural Component (Discussed with Dr. Mohammed Al-Kawlani)

Once again the agricultural component of the questionnaires did not address some of the basic issues that may have implications on agriculture as a whole. Response to the questions in the questionnaires as presented will not shed light on such issues as:

- Qat production in the past and present;
- Proportion of agricultural land used for Qat production;
- Implications of Qat production on irrigation water utilization;
- Implications of Qat production on income of farmers, food habits of farmers, etc.

The inclusion of the following questions and similar others is expected to fill this gap.

- What were the common crops when you were young?
(Before you got married)
- What is grown on the land at present? (List of crops)
- What was the main source of water for agriculture? (when you were young before getting married) Rain () Ground water () Surface water ()
- What is the main source of water for agriculture at present? Rain () Surface water () Ground water ()
- What agricultural produce were commonly sold in the market when you were young? (Before you got married)

Name a few crops in order of importance (3-4 crop types)
- What agricultural produce is sold in the market at the present? List a few crops in order of importance (3-4 crop types)
- Do sales from agriculture produce bring more money to the family at present than in the past?

Yes ()
No ()
- What crops give highest return in cash value?

Name two crops in order of importance.
- Who had more income from sales of agricultural produce (measured by value in real terms, clothing, house type, etc.)

Your father ()
Yourself ()
- What was the eating habit of the family and the composition of food items when you were young (before you were married)?
- What is the eating habit of the family and the composition of food items at present?
- How large is your farm, and how much of it is under Qat cultivation?

3.3.3 Environmental Component
(Discussed with Dr. Ali Albar)

There is a need to explain what aspects of environment are to be addressed in this section. Assuming that socio-economic as well as agricultural components are addressed elsewhere, emphasis here need be given to implications of Qat production on health, natural resources, including soil, water, biodiversity, etc.

The sources of the information required are many, among whom are health officials at all levels, pesticide/fertilizer traders, import/customs officials, agricultural extension agents, policy makers, farmers, sectoral ministries in the water, land sectors, law enforcing officers. Hence interviews have to be carried out with as many relevant individuals as possible. Questionnaires need be designed to address customs officials and traders, respectively, in addition to those already formulated to address farmers.

There were many areas of environmental concern which were not addressed by the questionnaire.

The following issues need be addressed in order to make the questionnaires comprehensive enough.

- Have there been any accidents/deaths as a result of pesticide misuse?
- Have there been an increase in pesticide use parallel with the increase in Qat production?
- Are there regulations that control pesticide use? Are they effective?
- Has there ever been a report on contamination of groundwater as a result of pesticide misuse?
- What happens to containers of pesticide once the content is used?
- Does Qat production use more water compared with other crops cultivated in Yemen?
- Has there been a change in the quality of water because of pesticide/fertilizer misuse?
- Do pesticide users usually follow instructions on proper use/application of the pesticide in question?

- Do people appreciate the potential dangers of exposure to pesticides?
- Where is the pesticide stored at the farm level?

Questions which may generate information to prove/disprove that Qat production:

- * exacerbates soil erosion;
- * degrades soil fertility;
- * reduces crop biodiversity;
- * leads to greater misuse of pesticides compared with other crops;
- * creates dependency on crop imports;

should also be included.

3.3.4 Policy Component

There are no questionnaires formulated for this section; the main reason being that this section awaits the information that will be generated by the other components of the research project. A format of analysis is prepared and it is fairly comprehensive. All the same, the questions outlined below, among others, could provide an idea of areas where policy intervention may be required.

- . Have there been any impacts on any policy as a result of enhanced Qat production?
- . What policy changes are required as a result of the research findings - Example in:
 - . Agriculture Policy
 - . Trade Policy
 - . Water Policy
 - . Qat Consumption Place/Time Regulation
 - . Working Hours Regulation

4.0 WORKSHOP MANAGEMENT AND REPORTING

4.1 Workshop programme

A workshop programme was prepared by the Consultant, in consultation with the research team. The programme thus prepared is annexed (Annex 7.2).

4.2 Format for the Workshop Proceedings

The Consultant advised the research team to follow a format often used in the compilation of workshop proceedings (Annex 7.3).

It was unfortunate that the Consultant was unable to go through the draft of the proceedings. The draft was not ready when the Consultant left a week after the workshop was held.

4.3 Reporting

The research team has submitted its first Interim Report (both Financial and Technical) to IDRC. The content of the report leaves a lot to be desired. It is suggested that the team follow the format provided (Annex 7.1) for the technical components of the Second Interim Report and subsequent reports. The essence of each section, as presented in the suggested format, was discussed with the research team in detail and full understanding is reached between the team and the Consultant. The format was appreciated by the research team.

5.0 FIELD STUDIES

5.1 Areas Visited

The Consultant, with some members of the research team, spent a total of four days in the field, i.e. 12, 13, 14, and 15 November 2000. This provided ample opportunity to discuss, away from the office where interference is commonplace, all aspects of the project.

- 12 November - Visit to a farming community about 60 Km from Sana'a, a place called Bani Hushaish. The activities constituted preliminary assessment of the farm area under Qat production; informal discussions with members of the farming communities; water use and water source for Qat production; extent of Qat production; economic importance of Qat production, etc.
- 13 November - Trip to Taiz and observation of Qat farmers and discussion with Qat farmers and Qat retailers.
- 14 November - Trip to Jebel Sabir, near Taiz. The research team had a lot of opportunity to test, informally, some questionnaires, mainly focusing on the socio-economic component of the study. The mountain side leading to the top of Jebel Sabir is indeed splendid and invariably covered by Qat plant till one climbs to about 2800 masl; from then on, Faba bean farms, with some wheat farms, become prevalent.

In the early afternoon, the research team had discussion with women Qat traders, once more focusing on the socio-economic component of the research project.

The team then proceeded to Aden. There were no Qat farms in the lowlands around Aden.

In late afternoon, the team leader and the Consultant held a meeting with a group of women.

- 15 November - the team travelled back to Sana'a through Al Habilayn, Ad Dali to meet the road leading to Taiz at Yarmin.

5.2 Testing of Questionnaires

The field visits mainly comprised confidence building measures. The questionnaires were not formally administered. However, questions in the socio-economic component, the agricultural component and the environmental component, were addressed to individual members of farming communities, respectively. Even then, all the questions in each of the sectoral questionnaires were not fully administered. This was apparently found difficult culturally. It was explained to me that questionnaires were not welcome by the Yemeni community in general, especially by farmers and traders. Community members tend to be hostile when they see paper-based or audio/video based recordings. How the research team is to circumvent this constraint is not very clear. It is apparent that a lot of confidence building will be required prior to the administration of some sensitive questions.

The questionnaires have to be tested in areas outside those selected for the research. The questionnaires have been substantively simplified and clarified. It is expected that there will not be any major changes made in them as a result of further testing.

In Aden the socio-economic expert and the Consultant met a group of five women of whom some were Qat chewers; others not. One non-Qat-chewer's husband is a Qat chewer; while the husband of one of the Qat chewers was not a Qat chewer. In couple of cases, both husband and wife were Qat chewers. Each question in the socio-economic component (Qat chewers) was addressed to these ladies. No difficulties were encountered in the process. However, these ladies may not be representatives of the community, since all were elites (school teachers, etc.).

5.3 General Field Observations

In Bani Hushaish area, there were some fields with grapes but the main crop in all sheltered areas was Qat.

In the Taiz field after field was covered with Qat. Most farmers had made provision for frost, - some sort of cover as frost protection. Each farm plot has a guard house (tower), with small window openings on all sides, located at high ground in one corner of the farm. There must be some theft of Qat going on to warrant such structure. It is also evident that Qat is indeed a very important crop in Yemen.

Deep wells are common place. Diesel driven motors are used for pumping water up. The investment that one observes on a good Qat farm gives an impression that Qat farming must have good returns.

5.4 Preliminary Conclusion Based on the Field Visits

5.4.1 Data Gathering tools

Administration of questionnaires apparently is a very unwelcome activity amongst farmers as well as the business community. They tend to associate administration of questionnaires with taxation and other government levies. Despite serious efforts in confidence building farmers still remain suspicious of the motives of researchers. Hence a lot of shortcomings are expected in the administration of questionnaires.

In order to reduce the effect of this constraint, it is highly recommended that a lot of 'case studies' be carried out to serve a major means of qualitative data generation. Story telling is culturally acceptable and quite manageable. Therefore, as many case studies as possible, in all aspects of the research endeavour, need be compiled by the research team.

Therefore the tools for data generation will include:

- Case studies
- Focused Interviews
- Questionnaire Administration

5.4.2 Sampling

General

After a careful consideration of what is on the ground, the following approach was agreed upon by the research team.

Each component of the research should have questionnaires. However, the questionnaires that will address **farmers** need be compiled as one, and administered by the research team as a whole.

The questionnaires aimed at farmers will be administered to fifteen families in each of the following three Qat growing areas. In each case five families with small Qat farms, five families with medium size Qat farms, and five families with large Qat farms, making a total of fifteen families in each farm community, and a ground total of 45 farm families, will respond to the questionnaire.

All questions prepared by the research team, intended to address farmers, will be pooled together and administered jointly.

The selected sites include:

- Sana'a area;
- Haga area;
- Damar area.

The questionnaire to be administered to farmers will have three components (i.e. socio-economic, agricultural and environmental) as follows:

Questionnaire to be Addressed to Farmers

1. Socio-economic Component

- 1.1
- 1.2
- 1.3
- 1.4
- 1.5
- .
- .
- .

2. Agricultural Component

- 2.1
- 2.2
- 2.3
- 2.4
- 2.5
- .
- .
- .

3. Environmental Component

- 3.1
- 3.2
- 3.3
- 3.4
- 3.5
- .

The researchers responsible for each component should carry out their field studies jointly, going to the same communities at the same time, and each managing five families in each of the selected three farm communities. This setting gives the research team a chance to consult one other immediately, if and when the need arises. The work in one farming community will be completed in one day.

There is also a need to formulate general questions (non-sectoral) on Qat consumptions that need be administered to a large group of Qat consumers to find out the proportion and composition of people who chew Qat.

It has been agreed to include the following general questions; and in as much as possible the head of the household should respond to these questions.

General Questionnaire

1. How many people are there in the family (household)?
2. How many members of the family chew Qat?
3. Who Chews Qat in the family?

	Yes	No
Father		
Mother		
Son/s		
Daughter/s		
Others		

4. What is your opinion on Qat chewing?
It is Good (); Bad (); Neutral ()
Give reasons
.....
.....
.....
.....
5. What is the main source of income of the head of the family (household)?

Government Employee (); Non-government Employee (); Self Employed (); Other ()
Explain

.....
.....
.....

This questionnaire is to be administered in three cities and three rural/farming communities; 1500 - 2100 questionnaires will be administered in each of the three cities and 90 - 120 questionnaires will be administered in each of the three rural/farming communities. The rural areas identified include surroundings of Sana'a, Hodeida and Sion. The questionnaire will be administered to 90 - 120 people in each of these rural areas.

Three urban centers, namely Aden (non Qat producing area, Sana'a (limited Qat producing area), and Taiz (an area with high Qat production are selected. In each city, as stated above, 1500 - 2100 questionnaires will be administered as follows:

500 - 700 in poor residential areas
500 - 700 in medium income residential areas
500 - 700 in high income residential areas

A total of 4500 - 6300 questionnaires will be administered in the three cities.

The questionnaires are to be administered by university and/or senior high school students with the support of staff of respective academic institutions, preferably the head of the institution and some teachers (at least three per school). Questionnaire administrators will be given a half-day training and will be provided with modest financial support for the assignment.

Sectoral

Socio-economic Questionnaires

In addition to those that will be administered to farmers, two additional questionnaires are required, one to be administered to retailers and the other one to Qat consumers.

Retailers

Twenty retailers from each of the following areas will be addressed.

- Sana'a
- Hodeida
- Sion

Hence a total of 60 retailers will respond to questionnaires.

Consumers

Ten families from each of the following areas will be required to respond to a more detailed questionnaire (compared with the general questionnaire).

- Sana'a
- Hodeida
- Sion

Hence a total of 30 families will respond to this questionnaire.

Agricultural Questionnaire

There are no additional questionnaire required by this component, in addition to those administered to farmers jointly. However, there will be a need for a series of interviews to be carried out with policy makers, experts, agricultural extension agents on matters relevant to water use, fertilizer use, landuse, among other issues.

Environmental Questionnaires

There is a need to formulate questionnaires aimed at agricultural input traders. Most of the questions are already formulated; it is a matter of repackaging them and formulating a few additional ones, relevant to the issues indicated as important for the environmental aspect of the study.

A minimum of 60 traders, twenty in each of three selected cities (preferably including Taiz, Sana'a and Aden) need respond to the questionnaire.

Interviews have to be carried out with customs officials, policy makers (environment, trade) health officials, agricultural extension agents. In each case a minimum of five people should be interviewed.

6.0 THE WAY FORWARD

6.1 Coordination

Discussing the questionnaires with individual members of the team gives an impression that one is dealing with many projects. The need for improvement of coordination is very apparent in the design of questionnaires. The questionnaires could have been designed in such a way that they complement one another. This was not common; and this issue was considered in the revised questionnaires.

The research team is advised to work as a team rather than as individual researchers. It is expected, in the future,

that every member will have equal appreciation of the project as a whole and what is going on in the form of activities.

6.2 Research Team Meetings and Field Visitations

There is very little institutional memory in the form of minutes and field reports recorded by the research team. The need to formalize research team meetings and field visitations were appreciated. The research team has agreed to take these research activities seriously in the future; and this will be reflected in the subsequent interim reports.

The Consultant has been convinced that the research team highly values the suggestions made, and that it will respond to them positively in all its future activities.

6.3 Analysis of Results

The data generated from the field is to be analysed using common scientific analytical tools/procedures. Most of the presentations will be descriptive, stating facts and figures. There will be a need to test significance of correlation in certain cases. Testing for correlations (either positive or negative) for significance will depend on the researchers' familiarity of such analytical tools. Any test in which the researchers are familiar with should be able to serve the purpose.

7.0 ANNEXES

ANNEX 7.1 Suggested Format for Interim Reports

The format of the report (Suggestion on how to format information in the Interim Report)

1. INTRODUCTION

- 1.1 Importance of the project
- 1.2 Summary of the project
- 1.3 Milestones in the project life (Activity milestones)
- 1.4 Summary of activities carried out to date

2. LITERATURE REVIEW

- 2.1 Socio-economic Issues Including Health
- 2.2 Agricultural Issues
- 2.3 Environmental Issues
- 2.4 Policy/Institutional Issues
- 2.5 Analysis of the Information

3. FIELD VISITATION (here is where the information is analysed, and gaps are subsequently identified)

- 3.1 Objective/Purpose of visitations
- 3.2 Outcome of field visitations
 - 3.2.1 Site Selection and criteria
 - 3.2.2 Major issues identified for formulation of questionnaires

4. QUESTIONNAIRE FORMULATION AND TESTING (Type of questionnaire and why)

- 4.1 Questionnaires
 - 4.1.1 Socio-economic Questionnaires
 - 4.1.2 Agricultural Questionnaires
 - 4.1.3 Environmental Questionnaires
 - 4.1.4 Policy/Institutional Questionnaires
(Here you only desire the questionnaires what they intend to reveal)
- 4.2 Testing the questionnaires

5. BIBLIOGRAPHY

There is a need to compile a comprehensive bibliography on Qat with abstracts, whenever possible.

Bibliography on:

- 5.1 Socio-economic issues (including health issues)
- 5.2 Agricultural Issues
- 5.3 Environmental Issues
- 5.4 Policy/Institutional Issues

For Reference Citation, use the format that is already agreed upon.

Examples (published)

Omer, A.H.S. 1978. Oxamniquine for treating *Schistosoma mansoni* in the Sudan. Brit. Med. J., 2:163-165

Unpublished

Environment Protection Council. 1999. Unpublished Report. 25 pp

Books:

Bleding, D.L. 1965. textbook of Parasitology, Third Edition. Meredth Publishing Co. New York. 1374 pp.

6. SUMMARY OF WORKSHOP PROCEEDINGS

- 6.1 Brief Summary of Presentation
- 6.2 Discussions including question and answers

7. APPENDICES

- 7.1 Questionnaires
 - 7.1.1 Socio-economic
 - 7.1.2 Agricultural
 - 7.1.3 Environmental
 - 7.1.4 Policy/Institutional
- 7.2 Summary of Minutes of meetings of the Research Team carried out to date with list of members present, dates of meeting, etc.
- 7.3 List of field trips carried out to date, identifying who, where, when, etc. and a summary of the outcome of each field trip.
- 7.4 List of members of the Research Team with brief profile of each.

ANNEX 7.2 Workshop Programme

First workshop on "Socio-economic, Agricultural, and Environmental, Implication of Qat Production/Consumption in Yemen" to be held on 11 November 2000, at the office of the Business Woman Group in Yemen.

Saturday 11 November, 2000	
0930 - 1000 hrs Registration	
First Session 1000 - 1100 hrs Chairperson Eng. Mohsen Al Hamadani; Head, Environment Protection Council	
1000 - 1010 hrs	Dr. Hussain Al Gunaid - Introduction
1010 - 1025 hrs	Dr. Bamatraf, Vice Minister of Agriculture and Irrigation - Keynote Speech
1025 - 1100 hrs	Dr. Mahasen Al-Munibari - An Overview of the Research Project
1100 - 1130 hrs	Tea/Coffee Break
Second Session 1133 - 1530 hrs Chairperson - Dr. Al Gunaid/ Dr. Ali Albar	
1130 - 1215 hrs	Dr. Mahasen Al-Munibari - Socio Economic Implication of Qat Consumption/Production
1215 - 1300 hrs	Dr. Ali Albar - Environmental Implication of Qat Consumption/Production
1300 - 1330 hrs	Coffee/Tea Break
1330 - 1415 hrs	Dr. Mohammed Al Kawlani - Agricultural Implication of Qat Consumption/Production
1415 - 1500 hrs	Dr. Hussain Al Gunaid - Policy Issues/Qat Consumption/Production
1500 - 1600 hrs	General Discussion
Rapporteur of the Workshop: Mr Ahmed Al Gunaid Facilitator : Dr. Ali Albar	
Back Stopping: Shibru Tedla - Consultant	

ANNEX 7.3 Workshop Proceedings (Format)

1. Introduction (opening session), Session One

- Keynote Address
- Overview of Project

2. Presentation of Findings (Session Two)

- Socio-economic component;
- Agricultural component;
- Environmental component;
- Policy/Institution component;
- Discussion on Presentations.

3. Recommendations (Session Three)

4. Annexes

- List of Participants
- Workshop Programme
- Questionnaires used in the Research Project

ANNEX 7.4 Itinerary of Consultant (Shibru Tedla)
(7 November - 19 November, 2000)

Day	Date	Activities
Tuesday	7 November	Arrival in Sana'a
Wednesday	8 November	Morning Meeting the Chairperson of EPC and Meeting with Dr. Hussain Al-Gunaid Drafting the workshop programme Agreement on schedule of consultant Afternoon Meeting with Dr. Hussain Al-Gunaid
Thursday	9 November	Morning Meeting with Dr. Mahasen and Ms Soad Abed Al Iryani (the socio-economic component research team) Afternoon meeting with Ali Abar (the Environmentalist member of the research team)
Friday	10 November	Morning Meeting with Dr. Ali Abar Afternoon Meeting with Dr. Mohammed Al-Kawlani
Saturday	11 November	Workshop for the whole day
Sunday	12 November	Field trip to Bani Hushaish Confidence building visit to farming communities Present were: Dr. Mahasen Munibari Dr. Mohammed Al-Kawlani Dr. Ali Albar
Monday	13 November	Field trip to Aden Observation of Qat field on the way to Taiz. Spent a night in Taiz. Present were: Dr. Mahasen Munibari Dr. Ali Albar Dr. Mohammed Al-Kawlani
Tuesday	14 November	Morning - Discussion with farm families in Jebel Sabir area. Observations of farm fields. Afternoon - Discussion with women Qat traders. Trip to Aden. In the afternoon we had a group discussion with women both Qat chewers and non-chewers. Spent the night in Aden.
Wednesday	15 November	Back to Sana'a through ... Very many Qat fields in the highlands
Thursday	16 November	Based on field findings, discussion with the research team (all day) Present were: Dr. Mahasen Munibari Dr. Mohammed Al-Kawlani Dr. Ali Albar
Friday	17 November	HOLIDAY - Compilation of Report
Saturday	18 November	Morning: The Research Team: Discussion on methods of analysis of data. Present were: Dr. Mahasen Munibari Dr. Mohammed Al-Kawlani
Sunday	19 November	Consultant leaves for Addis Ababa